globe somewhat analogous to that which takes place during a severe frost in those deeper lakes of the country that never freeze, and in which the surface stratum, in consequence of becoming heavier as it becomes colder than the nether strata, is for ever sinking, and thus making way for other strata, that cease to be the surface strata in turn. This sinking process, though persistent in the main, must have been of an intermittent and irregular kind. In some instances, forests seem to have grown on vast platforms, that retained their level unchanged for centuries, nay, thousands of years together : in other cases the submergence seems to have been sudden, and to such a depth, that the sea rushed in and occupied wide areas where the land had previously been, and this to so considerable a depth, and for so extended a period, that the ridges of coral which formed, and the forests of Encrinites which grew, in these suddenly hollowed seas, composed thick beds of marine limestone, which we now find intercalated with coal-seams and lacustrine silts and shales. There seem, too, to have been occasional upward movements on a small scale. The same area which had been occupied first by a forest, and then by a lake or sea, came to be occupied by a forest again ; and, though of course mere deposition might have silted up the lake or sea to the level of the water, it is not easy to conceive how, without positive upheaval for at least a few feet, such sur-faces at the water-level should have become sufficiently con-solidated for the production of gigantic Araucarians and Pines. But the sinking condition was the general one ; plat-form after platform disappeared, as century after century rolled away, impressing upon them their character as they passed ; and so the Coal Measures, where deepest and most extensive, consist, from bottom to top, of these buried plat-forms, ranged like the sheets of a work in the course of printing, that, after being stamped by the pressman, are then placed horizontally over one another in a pile. Another